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(54) Method for processing sheets in a mail processing system, mail processing system and related apparatus for implementing such method

Blattverarbeitungsverfahren in einem Postverarbeitungssystem, Postverarbeitungssystem und zugehörige Vorrichtung zur Durchführung dieses Verfahrens

Procédé de traitement de feuilles dans un système de traitement de courrier, système de traitement de courrier et dispositif en faisant partie pour la mise en oeuvre de ce procédé

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(56) References cited:
EP-A- 0 404 264
GB-A- 2 202 660

EP-A- 0 447 179

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Description

This invention relates to a method for processing sheets in a mail processing apparatus comprising a number of processing stations, at least including a printer and an inserter, and a control system controlling at least one processing station for printing sheets and assembling sheets to form at least one document to be mailed, wherein utilizing a text unit not belonging to the mail processing apparatus, at least one digital document is generated in digital form, in which at least one digital code also generated with the text unit is included, said digital code comprising information about the manner in which the control system is to control the processing stations, the digital document is supplied to the control system in digital form, the control system records the digital document in digital form, recognizes the digital code from the recorded digital document in digital form and, depending on the recognized digital code, controls at least one processing station other than the printer.

The invention also relates to a mail processing system comprising a mail processing apparatus comprising a plurality of processing stations, at least including a printer and an inserter, and a control system capable of controlling the printer and at least one other processing station for printing sheets and assembling sheets to form at least one document to be mailed, wherein the system further comprises a separate text unit, not belonging to the mail processing apparatus, capable of generating at least one digital document in digital form, in which at least one digital code also generated with the text unit is included, said digital code comprising information about the manner in which the control system is to control the processing stations for printing and assembling sheets; and wherein the control system, when the digital document is being supplied to it in digital form, is capable of recording the digital document in digital form, recognizing the digital code from the recorded digital document and, depending on the code, controlling at least one processing station other than the printer.

Such a method, and a mail processing system for practising that method, are often used when large amounts of documents, such as letters, bills, bank statements and the like are to be mailed. A difficulty involved here is that no efficient method is available for indicating how exactly a document to be mailed is to be assembled. Thus, it is often necessary to indicate whether a letter is merely to be printed, is to be inserted in an envelope, or enclosures are to be added, etc.

British patent application 2 202 660 presents a proposal for obviating the above-mentioned problems. In accordance with the known method a second printer, not belonging to the mail processing apparatus, is used to print batches of control documents such as utility bills, bank statements etc. in the form of fan-fold computer printouts. Selected values of identification codes are

also printed on these control documents in the form of a dash code. Subsequently, the printout is physically transferred to the inserter system of the mail processing apparatus for further preparation. The printout is then separated into discrete control documents, and a scanner is used to recognize the identification codes. These codes are used by the mail processing apparatus to select the digital code to be used for assembling sheets to form at least one document to be mailed. A disadvantage of the known system is that printouts have to be physically transported to the inserter of the mail processing apparatus for further preparation.

The object of the present invention is to provide a solution to this problem together with further advantages which will be discussed hereinafter.

The method according to the invention is characterized in that, the digital document also comprises digital text to be printed by the printer wherein the printer prints the digital text under the control of the control system.

Hence, in accordance with the invention the physical transport of documents is avoided. Furthermore, scanning of these documents and the correlation of scanned identification codes with digital control codes to produce a control of the processing apparatus is also avoided. This makes the system very reliable.

Dutch patent application 8901557 discloses a mail processing apparatus with an information source in which information has been entered and stored for producing and assembling an amount of documents. This information source generates a real-time information flow and therewith effects a direct and real-time drive of a plurality of processing stations. For that purpose, the mail processing apparatus further comprises an interface for separating from each other different types of instructions in the information flow.

Such a mail processing apparatus has been found to present practical drawbacks. For instance, the space in which a mail processing apparatus is arranged is typically not the most ideal place for preparing documents to be mailed and for storing these in the information source. Practice shows that the text of a document to be mailed is often prepared at an entirely different location than, for instance, the mailroom where the mail processing apparatus is arranged. The decision in what way the document is to be assembled from sheets is often made at the same location where the document is prepared. Such decisions relate, for instance, to the cutting of sheets, the folding of sheets, the sorting of sheets, the addition of enclosures and the filling of envelopes, which in this connection are also designated as a sheet or an assembly of sheets. Not only are the above documents typically prepared at a different location, but a further problem arises in that the above documents are prepared with equipment of an entirely different make than the mail processing apparatus. For instance, the above documents are typically prepared on a mainframe, so that it is impossible, or in any case economically unfeasible, to adapt the software of the mainframe

to the mail processing apparatus in such a manner that the mainframe can be used not only to generate the text of the document but also to indicate in what way sheets are to be processed in the mail processing apparatus.

Moreover, such an adaptation of the software typically cannot be implemented uniformly since often different types of mail processing machines are present which cannot be driven uniformly.

The invention meets all of the above disadvantages and because the system is provided with a text unit not belonging to the mail processing apparatus for generating at least one digital document in digital form, in which at least one digital code also generated with the text unit is included. Because any arbitrary separate text unit can be used to prepare a digital document comprising a digital text and a digital code, the above-mentioned problems are solved. Thus, in accordance with the invention, it is not the text unit that is adapted to the mail processing apparatus but the mail processing apparatus is adapted in order that it can cooperate with all conventional text units. Of course, in accordance with the invention, the mail processing apparatus can also be adapted to non-conventional text units. The major advantage, however, is that the adaptation of the mail processing apparatus can be implemented simply and fast. In this connection, a text unit is for instance a computer or mainframe comprising a word processing program. A digital document is a document in digital form generated with a text unit and may be stored on a diskette, in an electronic memory and all other conventional storage methods. The document thus obtained can be supplied to the control unit in all conventional ways, for instance by means of a diskette, as mentioned, but also by means of a direct connection between the text unit and the control unit.

European patent application 0 447 179 also discloses a mail processing apparatus including a printer for printing a document. However, no digital document is generated comprising both a digital text and digital codes as required by the present invention.

In accordance with a particular embodiment of the invention, depending on the code, printed sheets are assembled by the processing stations to form the document to be mailed. The code may then comprise, for instance, information about the way in which sheets are folded, enclosures are added, the number of sheets to be inserted in an envelope and how filled envelopes are to be sorted. It is even possible that a part of the sheets are preprinted. In particular, depending on the code, at least a part of a sheet is printed by the printer. Thus, it is possible for the code to comprise a shortened designation of a name, address and city, which is printed in its entirety by the printer.

In accordance with one aspect of the invention, the digital document is provided, by means of the text unit, with a code comprising a non-print code, which cannot be printed by the printer. The advantage of this is that the digital code can be placed in a digital text without it

being possible to subsequently read this code in the printed document. Here, too, in accordance with the invention, a major advantage is gained in that such codes are often already available on standard word processing software. Thus, the non-print code may for instance comprise an escape sequence. It is also possible, however, to include, for instance, a code beginning and ending with, respectively, a shift-in and a shift-out code from the well known ASCII table. In that case the control unit is adapted to recognize such codes and drive the processing stations accordingly.

It is also possible, however, that the digital document is provided by the text unit with a code comprising a print code which can be printed by the printer. In that case, in accordance with a particular embodiment of the invention, the print code is removed from the digital document by the control system, whereafter the remainder of the digital document is supplied to the printer. The removed print code is interpreted by the control system for driving the processing stations. On the other hand, it is possible, in accordance with the invention, that the print code is not removed from the digital document by the control system, so that the entire digital document, including the print code, is printed by the printer. Of course, in that case the print code can also be used for controlling processing stations as described hereinabove. If the print code is not removed, the print code can for instance be provided, by means of the text unit, with an indication which is characteristic of an addressee or group of addressees. When such an indication is printed on a sheet of paper to be mailed, this will in most cases not be experienced as objectionable or may even be regarded as desirable. The print code can be recognized directly by the control system in the same manner as that in which a non-print code can be recognized, i.e., recognition takes place on the basis of the digital document which is (still) stored in the control system.

The addition of a code to a digital document need not be carried out with the word processing program of the text unit with which the text of the digital document is generated. It is also possible to temporarily start another program, from or side by side with the word processing program, which is particularly suitable for adding a code to the digital document. After the code has been inputted, the latter program can be ended, whereafter, if so desired, it is possible to continue with the word processing program. This last-mentioned program can address a memory of a text unit through the keyboard data flow as well as directly. It is moreover possible to input the code by way of a separate input unit which is coupled to the text unit.

For the recognition of codes, i.e., print codes and non-print codes, many possibilities are conceivable in accordance with the invention. The examples given hereinafter should therefore not be considered limitative. Thus, it is for instance possible for a code or a part thereof to be recognized by the control system on the

basis of its position in the document. This may for instance be the first or the last line of the document. According to another method it is possible for a code or a part thereof to be recognized by the control system on the basis of its content. This may for instance be a bank account number or giro account number which represents a code indicating, for instance, to which address a printed sheet is to be mailed. Another possibility involves a number of lines at the end of a document, where the enclosures of the document are enumerated. By counting this number, a print code is defined, which indicates how many enclosures belong to the document.

In accordance with an entirely different aspect of the invention, the control system comprises a data base which is designed to be addressable with a code, the arrangement being such that the control system addresses the data base on the basis of a code obtained from a digital document, reads out the information stored in the data base at the address corresponding with the code; and, on the basis of this information, drives the processing stations for printing sheets and/or assembling these sheets to form the document to be mailed. In accordance with this set-up of the invention, it is for instance possible to limit the length of a code in a digital document while nonetheless with this short code large amounts of control information can be transmitted to the various processing stations. Thus, the information from the data base may comprise a predetermined text part which is printed on the sheets by the printer. It is also possible, however, that the data base comprises series of control commands for other processing stations, which can be called by means of the code.

The code-concept according to the invention opens up a whole range of possibilities where this code can be applied. The code may for instance be unique, such as a name-address-and-city, but may also designate a group of addressees, such as for instance a zip code would. On the basis of such a code it can for instance be determined which enclosures should be added to a letter. Such a code can also be used to control a franking machine belonging to the mail processing apparatus. The date of a document can also function as a code or part thereof, so that, depending on the date of the document to be mailed, it can be determined which enclosure is added. On the basis of a print code as well as a non-print code, the order of documents to be processed can be determined. If, for instance, advertising material is to be mailed to a large group of addressees personally, the documents, before being printed, can be sorted according to zip code on the basis of the code.

It is also possible that, on the basis of a code recognized by the control system, a new code is generated which is subsequently printed. The new code can for instance comprise a bar code which is generated on the basis of a 'sofi' number [official Dutch social-fiscal registration number] which functions as the code to be recog-

nized by the control system.

Another particular application of the code-concept according to the invention is the verification of the correctness of data on the basis of a code recognized by the control system. Thus, a bank account number can for instance function as a code with which the data base referred to is addressed. Stored in this data base are all addresses which belong to such an account number, so that the control system can check whether the address addressed by the code corresponds with the address mentioned in the digital document.

According to a very particular embodiment of the invention, by means of the control system a data base is built up on the basis of codes recognized by the control system. If the code concerns, for instance, an addressee or group of addressees, it can be monitored what documents have been mailed to whom at any given time. This makes it possible on the basis of the data base to afterwards generate statistical information about documents which have been mailed. At the same time it can be monitored how intensively certain processing stations have been used. On the basis of this information it can be determined whether certain components - processing stations - of the mail processing apparatus need to be serviced, should be replaced or, for instance, have to be resupplied with sheets. In addition, on the basis of the data base built up, status reports can be generated which state at what time a document was mailed to an addressee.

The supply of a digital document generated with the separate text unit to the control system of the mail processing apparatus can be implemented in different ways. According to an advantageous method, the digital document generated by the text unit is stored on a data carrier, such as for instance a diskette, whereafter the data carrier is brought to the control system and subsequently read out by the control system. It is also possible, however, that the digital document generated by the text unit is supplied to the control system by way of a line.

According to a highly progressive aspect of the invention, the control system generates feedback information comprising data about sheets and/or documents processed by the mail processing apparatus. This feedback information can be stored on a diskette, for instance to be evaluated at a different location at a later time. It is also possible for this information to be supplied to a separate mainframe, where a file can be set up which comprises data about the sheets processed by the mail processing apparatus. The uses of this file are comparable to those indicated above with reference to the data base built up by the control system itself.

A mail processing system according to the invention is characterized in that the digital document also comprises digital text to be printed by the printer wherein the control system is capable of controlling the printer for printing the digital text.

The invention will now be further elucidated with

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reference to Fig. 1 showing a mail processing system according to the invention. Reference numeral 1 in Fig. 1 denotes a mail processing system. The mail processing system 1 comprises a mail processing apparatus 2 and a text unit 4. The text unit 4 is, for instance, a separate mainframe computer which does not form any part of the mail processing apparatus 2. Such a mainframe computer may be provided with a word processing program of the type which is generally known and thus can function as a text unit with which digital documents can be prepared. A digital document is a document generated with the text unit 4 and which can be stored in digital form on a diskette, in an electronic memory of, for instance, the text unit 4 or all other conventional means for storage.

The standard text unit 4 is often already available when the mail processing apparatus is purchased and will typically be disposed at an entirely different location in a building than is the mail processing apparatus 2. It is essential, accordingly, that the text unit 4 and the mail processing apparatus 2 may be of entirely discrete design and be stationed entirely separately from each other.

The mail processing apparatus 2 comprises a control system 6 and a mail processing line 8. The mail processing line comprises, for instance, the following processing stations: a printer 10, a burster 12, an accumulating station 14, an enclosure adder 16, a folding machine 18, an inserter machine 20 and a franking machine 22. It is pointed out with emphasis that the type, order and number of the above processing stations are given exclusively by way of example and can be varied in many ways. The arrow 24 indicates the direction in which the processing of sheets to form mail pieces proceeds. The sheets may in this connection also comprise envelopes which are filled with other sheets. Moreover, for the sake of completeness, it is further observed that the burster 12 suggests the use of fanfold forms. It is, of course, also possible to process loose sheets so that the burster 12 can be omitted.

The arrows between the control system 6 on the one hand and the processing stations 10-22 on the other in each case represent a channel for transmitting information from the control system 6 to the processing stations 10-22 and vice versa. The control system 6 in this case comprises a computer 24 and an interface 26, which are connected with each other through a line 28.

The mail processing system 1 according to the invention works as follows. By means of the text unit 4 a digital document is generated which comprises a text for a document to be mailed. A digital document is a document in digital form generated by the text unit 4 and may be stored on a diskette, in an electronic memory and all other conventional means for storage. By means of the text unit 4 the digital document is further provided with a digital code comprising information about the manner in which the control system 6 is to control the processing stations 10-22 or a plurality of these processing sta-

tions. The digital code may comprise a non-print code and/or a print code. A non-print code is a set of digital characters which are not recognized by the printer 10 and therefore cannot be printed. If the text unit 4 utilizes, for instance, the ASCII table for binary registration of data, different combinations of codes from this table can be used as a non-print code. An example of this is the escape sequence, which, however, does not exclude other conceivable possibilities. Of course, other tables, such as the five-bit telex table or the eight-bit EBCDIC table, can be used as well for generating and registering the digital document.

However, a code may also comprise a print code. In this connection a print code is understood to mean a code which can be recognized by the printer 10 and results in the printing of a character, number, punctuation mark, any other symbol or a combination thereof when the print code is supplied to the printer. In this connection a space can also be seen as a possible print code or part of a print code. Practically speaking, a print code often involves a set of characters in the digital document which are visible as normal text on a screen of the text unit 4.

When the digital document has been prepared, it is supplied to the control system 6 of the mail processing apparatus 2. In the drawing the supply line 30 is depicted diagrammatically by broken lines and represents any possible way of supplying the digital document to the control system 6. Thus, it is possible for the digital document to be stored on a diskette by the text unit 4. The diskette is subsequently read by a disk-drive (not shown) of the computer 24. It is also possible, however, for the broken line 30 to represent an electrical line whereby the digital document can be transferred from the text unit 4 to the computer 24.

The document thus supplied to the computer 24 is further processed for driving the work stations 10-22 of the mail processing line 8. In accordance with a first embodiment, the control system 6 recognizes the codes from the digital document. These codes may for instance be recognized by their specific content (length of the code, structure of the code, et cetera) or by a specific predetermined position in the digital document where codes may be stored. It is, of course, also possible to use a combination of the above examples. In the present example, the digital document is transmitted from the computer 24 to the interface 26 and the recognition of the code is performed by the computer 24. The computer 24 passes the code to the interface 26. The interface 26 converts the detected code into control signals which are transmitted to the relevant processing stations. The document is also fed, by way of the interface 26, to the printer 10. If the code consists of a non-print code, the entire document can be fed directly to the printer 10 by way of the interface 26. In that case the non-print code will not be printed. If the code comprises a print code, the print code, if so desired, can be removed by the computer 24 from the digital document,

which is subsequently fed to the printer 10 by way of the interface 26. In addition, it is possible to replace the print code by a blank space or line, or by standard text, such as a running headline. Of course, it is also possible for the print code not to be removed and to be printed by the printer.

In accordance with a particular embodiment, the control system 6 further comprises an optical reader 32 which is connected with the computer 24 via a line 34. This reader can be used when the digital document comprises a print code which is printed by the printer 10. The print code can for instance be printed on the tearing edge of a fanfold form, but also in a random or fixed position in the rest of the printed document. By means of the optical reader 32, the computer 24 scans the document printed by the printer 10 and recognizes the print code, for instance by one or more of the above-mentioned methods. The print code recognized by the computer is fed to the interface which subsequently converts this print code into control signals with which the processing stations or a plurality of the processing stations are driven. It is pointed out with emphasis that the print code printed on a sheet may comprise not only control instructions for the processing stations for further processing the sheet in question but also for processing entirely different sheets which have not been printed yet or which have already been printed but are still traversing the mail processing line 8.

As stated above, the instructions converted into control signals for controlling the processing stations are transmitted to the processing stations 10-22. The control signals should result in the desired treatment at the instant when the document or a set of documents belonging to each other reach the processing station to which these instructions relate. If a number of documents or sets of documents which are to be kept separate, are simultaneously present in the processing line 8, the instant at which the treatment in question should be performed can be determined extremely reliably by means of the interface 26 and the 'ready' feedback signals transmitted to the interface from the stations, or on the basis of synchronization signals which the interface 26 generates itself. In the latter case, the feedback of signals from the processing stations 10-22 to the interface 26 can optionally be omitted. It is recommended, however, to provide at least for the signaling of failure of the interface 26 to enable automatic discontinuation of the generation of documents and/or sets of documents in the mail processing line 8 in case of failure.

To obtain a set of documents, it is possible to include an accumulating station 14 directly downstream of the printer 10 or, in the case of fanfold paper, downstream of the burster 12. Assembling the documents to form a set can then be realized, in accordance with the invention, by direct conversion of the relevant codes into control signals. If the set consists, for instance, of a letter to be signed, then it can be removed from the mail processing line 8 by a corresponding control in, for

instance, the accumulating station 14 or any other subsequent processing station. If the set is to be subsequently inserted again into the mail processing line or another similar mail processing line, then it may be preferable to provide further processing instructions in the form of print codes on the documents by means of the printer. Accordingly, in that case, a part of the codes is converted directly into control signals and another part into print codes. In such a case, use can be made of an apparatus comprising the optical reader 32.

It will be understood that within the scope of the invention many modifications and variants are possible. It has already been mentioned that the mail processing line 8 can be made up of any desired number of components of any desired type and in any desired order. Further, the arrows representing the various information flows between the various components of the apparatus are each provided with an arrowhead at either end to indicate that feedback signals can be generated to obtain optimum control of the apparatus. These feedback signals can contain all kinds of information, such as the completion of a particular operation, the passage of a document or set of documents, the report of failure, etc.

In accordance with a particular embodiment of the mail processing apparatus, the computer 24 comprises a data base designed to be addressable with a code. This data base can for instance be stored on a hard disk of the computer. The computer 24 addresses the data base on the basis of a code obtained from a digital document. The information stored in the data base at the address corresponding with the code is subsequently read out and fed to the interface 26. The interface 26 converts this information into control signals with which the processing stations are driven for the purpose of printing sheets and/or assembling these sheets to form the document to be mailed. According to this set-up of the invention, it is for instance possible to limit the length of a code while nonetheless with this short code large amounts of control information can be transmitted to the various processing stations.

It is also possible that on the basis of a code recognized by the computer 24 a new code is generated which is subsequently printed. The new code may for instance comprise a bar code which is generated on the basis of a social-fiscal registration number which functions as the code to be recognized by the control system.

Another particular application of the code-concept according to the invention is the verification of the correctness of data on the basis of a code recognized by the control system. Thus, with a code recognized by the computer, the data base can be addressed. Then the information stored at the relevant address can be compared by the computer with another part of the digital document which should correspond with this information.

According to a very particular embodiment of the

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mail processing apparatus 2, a data base is built up by the computer 24 on the basis of codes recognized by the computer 24. In this way, for instance statistical information about documents which have been mailed is generated. It is also monitored how intensively specific processing stations 10-22 have been used. On the basis of this information it is determined whether certain parts - processing stations - of the mail processing apparatus need to be serviced, replaced or, for instance, resupplied with sheets. In addition, on the basis of the data base built up, status reports are generated stating at what time a document was mailed to an addressee. These status reports are printed by the printer 24.

In accordance with a highly advanced embodiment of the mail processing apparatus 2, the computer 24 generates feedback information comprising data about sheets and/or documents processed by the mail processing apparatus. This feedback information can be stored on a diskette, for instance to be evaluated at a different location at a later time. It is also possible for this information to be fed by way of a line 30 to the text unit 4 where a file can be set up which comprises data about sheets processed by the mail processing apparatus. The uses of this file are comparable to those indicated hereinabove with reference to the file built up by the control system itself.

Finally, it is noted that the recognition of a code can also be performed by the interface 26. Further, the interface 26 and computer 24 may be integrated to form one unit of the control system 6.

Claims

1. A method for processing sheets in a mail processing apparatus comprising a number of processing stations, at least including a printer and an inserter, and a control system controlling at least one processing station for printing sheets and assembling sheets to form at least one document to be mailed, wherein utilizing a text unit not belonging to the mail processing apparatus, at least one digital document is generated in digital form, in which at least one digital code also generated with the text unit is included, said digital code comprising information about the manner in which the control system is to control the processing stations, the digital document is supplied to the control system in digital form, the control system records the digital document in digital form, recognizes the digital code from the recorded digital document in digital form and, depending on the recognized digital code, controls at least one processing station other than the printer, characterized in that, the digital document also comprises digital text to be printed by the printer wherein the printer prints the digital text under the control of the control system.
2. A method according to claim 1, characterized in that, depending on the code, printed sheets are assembled by the processing stations to form the document to be mailed.
3. A method according to claim 2, characterized in that the sheets are printed with the printer.
4. A method according to claim 1, 2 or 3, characterized in that, depending on the code, at least a part of a sheet is printed by the printer.
5. A method according to any one of the preceding claims 1-4, characterized in that by means of the text unit the digital document is provided with a code comprising a non-print code which cannot be printed by the printer.
6. A method according to claim 5, characterized in that the non-print code comprises an escape sequence or a shift-in/shift-out.
7. A method according to any one of the preceding claims, characterized in that by means of the text unit the digital document is provided with a code comprising a print code which can be printed by the printer.
8. A method according to claim 7, characterized in that the print code is removed from the digital document by the control system, whereafter the remainder of the digital document is supplied to the printer.
9. A method according to claim 7, characterized in that the print code is not removed from the digital document by the control system, so that the entire digital document including the print code is printed by the printer.
10. A method according to claim 9, characterized in that by means of the text unit the print code is provided with an indication which is characteristic of an addressee or group of addressees.
11. A method according to any one of the preceding claims, characterized in that a code or part of a code is recognized by the control system on the basis of its position in the document.
12. A method according to any one of the preceding claims, characterized in that a code or part of a code is recognized by the control system on the basis of its content.
13. A method according to any one of the preceding claims, characterized in that the control system comprises a data base designed to be addressable with a code, and the control system addresses the

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data base on the basis of a code obtained from a digital document, reads the information which is stored in the data base at the address that corresponds with the code; and, on the basis of this information, controls the processing stations for printing sheets and/or assembling these sheets to form the document to be mailed.

14. A method according to claim 13, characterized in that the information from the data base comprises a predetermined text part which is printed on the sheets by the printer.

15. A method according to any one of the preceding claims, characterized in that with the aid of the control system a data base is built up on the basis of codes recognized by the control system.

16. A method according to any one of the preceding claims, characterized in that the digital document produced by the text unit is stored on a data carrier, whereafter the data carrier is read by the control system.

17. A method according to any one of the preceding claims 1-15, characterized in that the digital document produced by the text unit is supplied to the control system with the aid of a line.

18. A method according to any one of the preceding claims, characterized in that the control system generates feedback information comprising data about sheets and/or documents processed by the mail processing apparatus.

19. A mail processing system (1) comprising a mail processing apparatus (2) comprising a plurality of processing stations (10-22) which at least include a printer (10) and an inserter (20), wherein the mail processing apparatus further comprises a control system (6) capable of controlling the printer (10) and at least one other processing station (12-22) for printing sheets and assembling sheets to form at least one document to be mailed, wherein the system (1) further comprises a separate text unit (4), not belonging to the mail processing apparatus (2), capable of generating at least one digital document in digital form, in which at least one digital code also generated with the text unit (4) is included, said digital code comprising information about the manner in which the control system (6) is to control the processing stations (10-22) for printing and assembling sheets; and wherein the control system (6), when the digital document is being supplied to it in digital form, is capable of recording the digital document in digital form, recognizing the digital code from the recorded digital document and, depending on the code, controlling at least one processing sta-

tion (12-22) other than the printer, characterized in that, the digital document also comprises digital text to be printed by the printer (10) wherein the control system is capable of controlling the printer (10) for printing the digital text.

20. A mail processing system according to claim 19, characterized in that, depending on the code, printed sheets are assembled by processing stations (12-22) to form the document to be mailed.

21. A mail processing system according to claim 19 or 20, characterized in that, in use, depending on the code, at least a part of a sheet is printed by the printer (10).

22. A mail processing system according to claim 19, 20 or 21, characterized in that the text unit (4), in use, provides the digital document with a code comprising a non-print code which cannot be printed by the printer (10).

23. A mail processing system according to claim 22, characterized in that the non-print code comprises an escape sequence or a shift-in/shift-out.

24. A mail processing system according to any one of the preceding claims 19-23, characterized in that, in use, the text unit (4) provides the digital document with a code comprising a print code which can be printed by the printer (10).

25. A mail processing system according to claim 24, characterized in that, in use, the control system (6) removes the print code from the digital document, whereafter the remainder of the digital document is supplied to the printer (10).

26. A mail processing system according to claim 24, characterized in that, in use, the control system (6) does not remove the print code from the digital document, so that the entire digital document including the print code is printed by the printer.

27. A mail processing system according to claim 26, characterized in that, in use, with the aid of the text unit (4) the print code is provided with an indication which is characteristic of an addressee or group of addressees.

28. A mail processing system according to any one of the preceding claims 19-27, characterized in that, in use, the control system (6) recognizes a code or part of a code on the basis of its position in the document.

29. A mail processing system according to any one of the preceding claims 19-28, characterized in that, in

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use, the control system (6) recognizes a code or part of a code on the basis of its content.

30. A mail processing system according to any one of the preceding claims 19-29, characterized in that the control system comprises a data base which is designed to be addressable with a code, whilst, in use, the control system (6) addresses the data base on the basis of a code obtained from a digital document, reads the information which is stored in the data base at the address that corresponds with the code, and, on the basis of this information, controls the processing stations (10-22) for printing sheets and assembling sheets to form the document to be mailed. 5 10 15
31. A mail processing system according to claim 30, characterized in that the information from the data base comprises a predetermined text part which is printed on the sheets by the printer (10). 20
32. A mail processing system according to any one of the preceding claims 19-31, characterized in that, in use, the control system (6) builds up a data base on the basis of codes recognized by the control system (6). 25
33. A mail processing system according to any one of the preceding claims 19-32, characterized in that the text unit (4) comprises means for storing the digital document produced with the text unit (4) on a data carrier, and the control system (6) comprises means for reading the information of the data carrier. 30
34. A mail processing system according to any one of the preceding claims 19-32, characterized in that, in use, the system (1) further comprises a line (30) with which the digital document produced by the text unit (4) is supplied to the control system (6). 35 40
35. A mail processing system according to any one of the preceding claims 19-34, characterized in that, in use, the control system (6) generates feedback information comprising data about sheets and/or documents processed by the mail processing apparatus (2). 45
36. A mail processing apparatus (2) of the mail processing system according to any one of the preceding claims 19-34. 50

Patentansprüche

1. Verfahren zum Verarbeiten von Blättern in einem Postverarbeitungsgerät mit einer Anzahl von Verarbeitungsstationen, welche zumindest einen Drucker und eine Einschiebvorrichtung beinhalten, und 55

einem Steuersystem, welches zumindest eine Verarbeitungsstation zum Drucken von Blättern und Zusammenstellen von Blättern zur Bildung zumindest eines zu verschickenden Dokumentes steuert, wobei unter Verwendung einer nicht zu dem Postverarbeitungsgerät gehörigen Texteinheit zumindest ein digitales Dokument in digitaler Form erstellt wird, in welchem zumindest ein auch mit der Texteinheit erstellter digitaler Code enthalten ist, wobei der digitale Code Informationen über die Art und Weise enthält, in welcher das Steuersystem die Verarbeitungsstationen steuern soll, das digitale Dokument in digitaler Form dem Steuersystem zugeführt wird, das Steuersystem das digitale Dokument in digitaler Form aufzeichnet, den digitalen Code von dem aufgezeichneten digitalen Dokument in digitaler Form wiedererkennt und, abhängig von dem erkannten digitalen Code, zumindest eine andere Verarbeitungsstation als den Drucker steuert, dadurch gekennzeichnet, daß das digitale Dokument auch von dem Drucker zu druckenden digitalen Text aufweist, worin der Drucker den digitalen Text unter der Steuerung des Steuersystems druckt.

2. Verfahren gemäß Anspruch 1, dadurch gekennzeichnet, daß, abhängig von dem Code, gedruckte Blätter von den Verarbeitungsstationen zusammengestellt werden, um das zu verschickende Dokument zu bilden.
3. Verfahren gemäß Anspruch 2, dadurch gekennzeichnet, daß die Blätter mit dem Drucker gedruckt werden.
4. Verfahren gemäß Anspruch 1, 2 oder 3, dadurch gekennzeichnet, daß, abhängig von dem Code, zumindest ein Teil eines Blattes von dem Drucker gedruckt wird.
5. Verfahren gemäß irgendeinem der vorherigen Ansprüche 1-4, dadurch gekennzeichnet, daß mittels der Texteinheit das digitale Dokument mit einem Code versehen wird, welcher einen Nicht-Druckcode aufweist, der von dem Drucker nicht gedruckt werden kann.
6. Verfahren gemäß Anspruch 5, dadurch gekennzeichnet, daß der Nicht-Druckcode eine Escape-Sequenz oder eine Option des Hinein-/Hinauswechsels aufweist.
7. Verfahren gemäß irgendeinem der vorherigen Ansprüche, dadurch gekennzeichnet, daß mittels der Texteinheit das digitale Dokument mit einem Code versehen wird, welcher einen Druckcode aufweist, der von dem Drucker gedruckt werden kann.

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8. Verfahren gemäß Anspruch 7, dadurch gekennzeichnet, daß der Druckcode durch das Steuersystem von dem digitalen Dokument entfernt wird, wonach der Rest des digitalen Dokumentes dem Drucker zugeführt wird.

9. Verfahren gemäß Anspruch 7, dadurch gekennzeichnet, daß der Druckcode nicht durch das Steuersystem von dem digitalen Dokument entfernt wird, so daß das gesamte digitale Dokument einschließlich des Druckcodes von dem Drucker gedruckt wird.

10. Verfahren gemäß Anspruch 9, dadurch gekennzeichnet, daß der Druckcode mittels der Texteinheit mit einem Hinweis versehen wird, welcher kennzeichnend für einen Adressaten oder eine Gruppe von Adressaten ist.

11. Verfahren gemäß irgendeinem der vorherigen Ansprüche, dadurch gekennzeichnet, daß ein Code oder Teil eines Codes von dem Steuersystem auf der Basis seiner Position in dem Dokument erkannt wird.

12. Verfahren gemäß irgendeinem der vorherigen Ansprüche, dadurch gekennzeichnet, daß ein Code oder Teil eines Codes von dem Steuersystem auf der Basis seines Inhalts erkannt wird.

13. Verfahren gemäß irgendeinem der vorherigen Ansprüche, dadurch gekennzeichnet, daß das Steuersystem eine Datenbasis aufweist, welche dafür eingerichtet ist, mit einem Code adressierbar zu sein, und das Steuersystem die Datenbasis auf der Basis eines von einem digitalen Dokument erhaltenen Codes adressiert, die Informationen, welche in der Datenbasis unter der Adresse, die dem Code entspricht, gespeichert sind, liest, und auf der Basis dieser Informationen die Verarbeitungsstationen zum Drucken von Blättern und/oder zum Zusammenstellen dieser Blätter zur Bildung des zu verschickenden Dokumentes steuert.

14. Verfahren gemäß Anspruch 13, dadurch gekennzeichnet, daß die Informationen von der Datenbasis einen vorbestimmten Textteil aufweisen, welcher von dem Drucker auf die Blätter gedruckt wird.

15. Verfahren gemäß irgendeinem der vorherigen Ansprüche, dadurch gekennzeichnet, daß mit Hilfe des Steuersystems eine Datenbasis auf der Basis von Codes, welche von dem Steuersystem erkannt werden, aufgebaut wird.

16. Verfahren gemäß irgendeinem der vorherigen Ansprüche, dadurch gekennzeichnet, daß das von

der Texteinheit hergestellte digitale Dokument auf einem Datenträger gespeichert wird, wonach der Datenträger von dem Steuersystem gelesen wird.

17. Verfahren gemäß irgendeinem der vorherigen Ansprüche 1-15, dadurch gekennzeichnet, daß das von der Texteinheit hergestellte digitale Dokument dem Steuersystem mit Hilfe einer Leitung zugeführt wird.

18. Verfahren gemäß irgendeinem der vorherigen Ansprüche, dadurch gekennzeichnet, daß das Steuersystem Feedbackinformationen mit Daten über Blätter und/oder Dokumente, welche von dem Postverarbeitungsgerät verarbeitet werden, erzeugt.

19. Postverarbeitungsstation (1) mit einem Postverarbeitungsgerät (2) mit einer Vielzahl von Verarbeitungsstationen (10-22), welche zumindest einen Drucker (10) und eine Einschiebvorrichtung (20) beinhalten, wobei das Postverarbeitungsgerät weiter ein Steuersystem (6) enthält, welches in der Lage ist, den Drucker (10) und zumindest eine andere Verarbeitungsstation (12-22) zum Drucken von Blättern und Zusammenstellen von Blättern zur Bildung zumindest eines zu verschickenden Dokumentes zu steuern, wobei das System (1) ausserdem eine getrennte Texteinheit (4) aufweist, welche nicht zu dem Postverarbeitungsgerät (2) gehört, und welche in der Lage ist, zumindest ein digitales Dokument in digitaler Form zu erzeugen, in welchem zumindest ein auch mit der Texteinheit (4) erzeugter digitaler Code beinhaltet ist, wobei der digitale Code Informationen über die Art und Weise aufweist, in welcher das Steuersystem (6) die Verarbeitungsstationen (10-22) zum Drucken und Zusammenstellen von Blättern steuern soll; und wobei das Steuersystem (6), wenn das digitale Dokument in digitaler Form zugeführt wird, in der Lage ist, das digitale Dokument in digitaler Form aufzuzeichnen, den digitalen Code von dem aufzeichneten digitalen Dokument wiederzuerkennen und abhängig von dem Code, zumindest eine andere Verarbeitungsstation (12-22) als den Drucker zu steuern, dadurch gekennzeichnet, dass das digitale Dokument auch von dem Drucker (10) zu druckenden digitalen Text aufweist, worin das Steuersystem in der Lage ist, den Drucker (10) zu steuern, um den digitalen Text zu drucken.

20. Postverarbeitungsstation gemäß Anspruch 19, dadurch gekennzeichnet, daß, abhängig von dem Code, gedruckte Blätter von den Verarbeitungsstationen zusammengestellt werden, um das zu verschickende Dokument zu bilden.

21. Postverarbeitungsstation gemäß Anspruch 19 oder

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- 20, dadurch gekennzeichnet, daß in Betrieb, abhängig von dem Code, zumindest ein Teil eines Blattes von dem Drucker gedruckt wird.
22. Postverarbeitungssystem gemäß Anspruch 19, 20 oder 21, dadurch gekennzeichnet, daß die Texteinheit in Betrieb das digitale Dokument mit einem Code versieht, welcher einen Nicht-Druckcode aufweist, welcher von dem Drucker nicht gedruckt werden kann.
23. Postverarbeitungssystem gemäß Anspruch 22, dadurch gekennzeichnet, daß der Nicht-Druckcode eine Escape-Sequenz oder eine Option des Hinein-/Hinauswechselns aufweist.
24. Postverarbeitungssystem gemäß irgendeinem der vorherigen Ansprüche 19-23, dadurch gekennzeichnet, daß die Texteinheit in Betrieb das digitale Dokument mit einem Code versieht, welcher einen Druckcode aufweist, der von dem Drucker gedruckt werden kann.
25. Postverarbeitungssystem gemäß Anspruch 24, dadurch gekennzeichnet, daß das Steuersystem in Betrieb den Druckcode von dem digitalen Dokument entfernt, wonach der Rest des digitalen Dokumentes dem Drucker zugeführt wird.
26. Postverarbeitungssystem gemäß Anspruch 24, dadurch gekennzeichnet, daß das Steuersystem in Betrieb nicht den Druckcode von dem digitalen Dokument entfernt, so daß das gesamte digitale Dokument einschließlich des Druckcodes von dem Drucker gedruckt wird.
27. Postverarbeitungssystem gemäß Anspruch 26, dadurch gekennzeichnet, daß in Betrieb der Druckcode mit Hilfe der Texteinheit mit einem Hinweis versehen wird, welcher kennzeichnend für einen Adressaten oder eine Gruppe von Adressaten ist.
28. Postverarbeitungssystem gemäß irgendeinem der vorherigen Ansprüche 19-27, dadurch gekennzeichnet, daß das Steuersystem in Betrieb einen Code oder Teil eines Codes auf der Basis seiner Position in dem Dokument erkennt.
29. Postverarbeitungssystem gemäß irgendeinem der vorherigen Ansprüche 19-28, dadurch gekennzeichnet, daß das Steuersystem in Betrieb einen Code oder Teil eines Codes auf der Basis seines Inhalts erkennt.
30. Postverarbeitungssystem gemäß irgendeinem der vorherigen Ansprüche 19-29, dadurch gekennzeichnet, daß das Steuersystem eine Datenbasis aufweist, welche dafür eingerichtet ist, mit einem Code adressierbar zu sein, während das Steuersystem in Betrieb die Datenbasis auf der Basis eines von einem digitalen Dokument erhaltenen Codes adressiert, die Informationen, welche in der Datenbasis unter der Adresse, die dem Code entspricht, gespeichert sind, liest, und auf der Basis dieser Informationen die Verarbeitungsstationen zum Drucken von Blättern und zum Zusammenstellen dieser Blätter zur Bildung des zu verschickenden Dokumentes steuert.
31. Postverarbeitungssystem gemäß Anspruch 30, dadurch gekennzeichnet, daß die Informationen von der Datenbasis einen vorbestimmten Textteil aufweisen, welcher von dem Drucker auf die Blätter gedruckt wird.
32. Postverarbeitungssystem gemäß irgendeinem der vorherigen Ansprüche 19-31, dadurch gekennzeichnet, daß das Steuersystem in Betrieb eine Datenbasis auf der Basis von Codes, welche von dem Steuersystem erkannt werden, aufbaut.
33. Postverarbeitungssystem gemäß irgendeinem der vorherigen Ansprüche 19-32, dadurch gekennzeichnet, daß die Texteinheit Vorrichtungen aufweist zum Speichern des mit der Texteinheit hergestellten digitalen Dokumentes auf einem Datenträger, und daß das Steuersystem Vorrichtungen zum Lesen der Informationen des Datenträgers aufweist.
34. Postverarbeitungssystem gemäß irgendeinem der vorherigen Ansprüche 19-32, dadurch gekennzeichnet, daß das System in Betrieb außerdem eine Leitung aufweist, mit welcher das von der Texteinheit hergestellte digitale Dokument dem Steuersystem zugeführt wird.
35. Postverarbeitungssystem gemäß irgendeinem der vorherigen Ansprüche 19-34, dadurch gekennzeichnet, daß das Steuersystem in Betrieb Feedbackinformationen mit Daten über Blätter und/oder Dokumente, welche von dem Postverarbeitungsgerät verarbeitet werden, erzeugt.
36. Postverarbeitungssystem (1) mit einem Postverarbeitungsgerät (2) mit einer Vielzahl von Verarbeitungsstationen (10-22), welche zumindest einen Drucker (10) und eine Einschiebvorrichtung (20) beinhalten, wobei das Postverarbeitungsgerät weiter ein Steuersystem (6) enthält, welches in der Lage ist, den Drucker (10) und zumindest eine andere Verarbeitungsstation (12-22) zum Drucken von Blättern und Zusammenstellen von Blättern zur Bildung zumindest eines zu verschickenden Dokumentes zu steuern, und wobei das Postverarbeitungsgerät durch einen der vorhergehenden

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Ansprüche 19-34 gekennzeichnet ist.

Revendications

1. Procédé de traitement de feuilles dans un appareil de traitement de courrier comprenant une pluralité de postes de traitement, incluant au moins une imprimante et un dispositif d'insertion, et un système de commande commandant au moins un poste de traitement pour imprimer des feuilles et assembler des feuilles pour former au moins un document à expédier, dans lequel, en utilisant une unité de texte n'appartenant pas à l'appareil de traitement de courrier, au moins un document numérique est engendré sous forme numérique, dans lequel au moins un code numérique également engendré avec l'unité de texte est inclus, ledit code numérique comprenant des informations en ce qui concerne la manière selon laquelle le système de commande doit commander les postes de traitement, le document numérique est fourni au système de commande sous forme numérique, le système de commande enregistre le document numérique sous forme numérique, reconnaît le code numérique à partir du document numérique enregistré sous forme numérique et, selon le code numérique reconnu, commande au moins un poste de traitement autre que l'imprimante, caractérisé en ce que le document numérique comprend également un texte numérique à imprimer par l'imprimante où l'imprimante imprime le texte numérique sous la commande du système de commande. 5 10 15 20 25 30
2. Procédé selon la revendication 1, caractérisé en ce que, selon le code, des feuilles imprimées sont assemblées par les postes de traitement pour former le document à expédier. 35
3. Procédé selon la revendication 2, caractérisé en ce que les feuilles sont imprimées avec l'imprimante. 40
4. Procédé selon la revendication 1, 2 ou 3, caractérisé en ce que, selon le code, au moins une partie d'une feuille est imprimée par l'imprimante. 45
5. Procédé selon l'une quelconque des revendications précédentes 1-4, caractérisé en ce que, par l'intermédiaire de l'unité de texte, le document numérique est muni d'un code comprenant un code de non impression qui ne peut pas être imprimé par l'imprimante. 50
6. Procédé selon la revendication 5, caractérisé en ce que le code de non impression comprend une séquence d'échappement ou une introduction par décalage/élimination par décalage. 55
7. Procédé selon l'une quelconque des revendications précédentes, caractérisé en ce que, par l'intermédiaire de l'unité de texte, le document numérique est muni d'un code comprenant un code d'impression qui peut être imprimé par l'imprimante.
8. Procédé selon la revendication 7, caractérisé en ce que le code d'impression est supprimé du document numérique par le système de commande, après quoi le restant du document numérique est fourni à l'imprimante.
9. Procédé selon la revendication 7, caractérisé en ce que le code d'impression n'est pas supprimé du document numérique par le système de commande, de sorte que le document numérique en totalité, incluant le code d'impression, est imprimé par l'imprimante.
10. Procédé selon la revendication 9, caractérisé en ce que, par l'intermédiaire de l'unité de texte, le code d'impression est muni d'une indication qui est caractéristique d'un destinataire ou d'un groupe de destinataires.
11. Procédé selon l'une quelconque des revendications précédentes, caractérisé en ce qu'un code ou une partie d'un code est reconnu par le système de commande sur la base de sa position dans le document.
12. Procédé selon l'une quelconque des revendications précédentes, caractérisé en ce qu'un code ou une partie d'un code est reconnu par le système de commande sur la base de son contenu.
13. Procédé selon l'une quelconque des revendications précédentes, caractérisé en ce que le système de commande comprend une base de données conçue pour être adressable par un code, et le système de commande adresse la base de données sur la base d'un code obtenu à partir d'un document numérique, lit l'information qui est mémorisée dans la base de données à l'adresse qui correspond au code et, sur la base de cette information, commande les postes de traitement pour imprimer des feuilles et/ou pour assembler ces feuilles pour former le document à expédier.
14. Procédé selon la revendication 13, caractérisé en ce que l'information à partir de la base de données comprend une partie de texte prédéterminée qui est imprimée sur les feuilles par l'imprimante.

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15. Procédé selon l'une quelconque des revendications précédentes, caractérisé en ce que, à l'aide du système de commande, une base de données est construite sur la base de codes reconnus par le système de commande. 5
16. Procédé selon l'une quelconque des revendications précédentes, caractérisé en ce que le document numérique produit par l'unité de texte est mémorisé sur un support de données, après quoi le support de données est lu par le système de commande. 10
17. Procédé selon l'une quelconque des revendications précédentes 1-15, caractérisé en ce que le document numérique produit par l'unité de texte est fourni au système de commande à l'aide d'une ligne. 15 20
18. Procédé selon l'une quelconque des revendications précédentes, caractérisé en ce que le système de commande engendre une information en boucle comprenant des données concernant des feuilles et/ou des documents traités par l'appareil de traitement de courrier. 25
19. Système de traitement de courrier (1) comprenant un appareil de traitement de courrier (2) comportant une pluralité de postes de traitement (10-22), les quelles incluent au moins une imprimante (10) et un dispositif d'insertion (20), l'appareil de traitement de courrier comprenant de plus un système de commande (6) capable de commander l'imprimante (10) et au moins un autre poste de traitement (12-22) pour imprimer des feuilles et assembler des feuilles pour former au moins un document à expédier, dans lequel le système (1) comprend de plus une unité de texte séparée (4), n'appartenant pas à l'appareil de traitement de courrier (2), capable d'engendrer au moins un document numérique sous forme numérique, dans lequel au moins un code numérique engendré également par l'unité de texte (4) est inclus, ledit code numérique comprenant une information concernant la manière selon laquelle le système de commande (6) doit commander les postes de traitement (10-22) pour imprimer et assembler des feuilles; et dans lequel le système de commande (6), quand le document numérique est en train d'être fourni à celui-ci sous forme numérique, est capable d'enregistrer le document numérique sous forme numérique, de reconnaître le code numérique à partir du document numérique enregistré et selon le code, de commander au moins un poste de traitement (12-22) autre que l'imprimante, caractérisé en ce que le document numérique comprend également

un texte numérique à imprimer par l'imprimante (10), le système de commande étant capable de commander l'imprimante (10) pour imprimer le texte numérique.

20. Système de traitement de courrier selon la revendication 19, caractérisé en ce que, selon le code, des feuilles imprimées sont assemblées par des postes de traitement pour former le document à expédier.
21. Système de traitement de courrier selon la revendication 19 ou 20, caractérisé en ce que, à l'utilisation, selon le code, au moins une partie d'une feuille est imprimée par l'imprimante.
22. Système de traitement de courrier selon la revendication 19, 20 ou 21, caractérisé en ce que l'unité de texte, à l'utilisation, fournit le document numérique avec un code comprenant un code de non impression qui ne peut pas être imprimé par l'imprimante.
23. Système de traitement de courrier selon la revendication 22, caractérisé en ce que le code de non impression comprend une séquence d'échappement ou une introduction par décalage/élimination par décalage.
24. Système de traitement de courrier selon l'une quelconque des revendications précédentes 19-23, caractérisé en ce que, à l'utilisation, l'unité de texte fournit le document numérique avec un code comprenant un code d'impression qui peut être imprimé par l'imprimante. 30 35
25. Système de traitement de courrier selon la revendication 24, caractérisé en ce que, à l'utilisation, le système de commande supprime le code d'impression du document numérique, après quoi le restant du document numérique est fourni à l'imprimante. 40
26. Système de traitement de courrier selon la revendication 24, caractérisé en ce que, à l'utilisation, le système de commande ne supprime pas le code d'impression du document numérique, de sorte que le document numérique en totalité, incluant le code d'impression, est imprimé par l'imprimante. 45 50
27. Système de traitement de courrier selon la revendication 26, caractérisé en ce que, à l'utilisation, à l'aide de l'unité de texte, le code d'impression est muni d'une indication qui est caractéristique d'un destinataire ou d'un groupe de destinataires. 55

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28. Système de traitement de courrier selon l'une quelconque des revendications précédentes 19-27, caractérisé en ce que, à l'utilisation, le système de commande reconnaît un code ou une partie d'un code sur la base de sa position dans le document. 5
29. Système de traitement de courrier selon l'une quelconque des revendications précédentes 19-28, caractérisé en ce que, à l'utilisation, le système de commande reconnaît un code ou une partie d'un code sur la base de son contenu. 10
30. Système de traitement de courrier selon l'une quelconque des revendications précédentes 19-29, caractérisé en ce que le système de commande comprend une base de données qui est conçue pour être adressable par un code, tandis que, à l'utilisation, le système de commande adresse la base de données sur la base d'un code obtenu d'un document numérique, lit l'information qui est mémorisée dans la base de données à l'adresse qui correspond au code et, sur la base de cette information, commande les postes de traitement pour imprimer des feuilles et pour assembler des feuilles pour former le document à expédier. 20 25
31. Système de traitement de courrier selon la revendication 30, caractérisé en ce que l'information à partir de la base de données comprend une partie de texte prédéterminée qui est imprimée sur les feuilles par l'imprimante. 30
32. Système de traitement de courrier selon l'une quelconque des revendications précédentes 19-31, caractérisé en ce que, à l'utilisation, le système de commande établit une base de données sur la base de codes reconnus par le système de commande. 35
33. Système de traitement de courrier selon l'une quelconque des revendications précédentes 19-32, caractérisé en ce que l'unité de texte comprend des moyens pour mémoriser le document numérique produit avec l'unité de texte sur un support de données, et le système de commande comprend des moyens pour lire l'information du support de données. 40 45
34. Système de traitement de courrier selon l'une quelconque des revendications précédentes 19-32, caractérisé en ce que, à l'utilisation, le système comprend de plus une ligne par laquelle le document numérique produit par l'unité de texte est fourni au système de commande. 50
35. Système de traitement de courrier selon l'une quelconque des revendications précédentes 19-34, caractérisé en ce que, à l'utilisation, le système de 55

commande engendre une information en boucle comprenant des données en ce qui concerne des feuilles et/ou des documents traités par l'appareil de traitement de courrier.

36. Système de traitement de courrier (1) comprenant un appareil de traitement de courrier (2) comportant une pluralité de postes de traitement (10-22), les quelles incluent au moins une imprimante (10) et un dispositif d'insertion (20), l'appareil de traitement de courrier comprenant de plus un système de commande (6) capable de commander l'imprimante (10) et au moins un autre poste de traitement (12-22) pour imprimer des feuilles et assembler des feuilles pour former au moins un document à expédier et dans lequel l'appareil de traitement de courrier est caractérisé selon l'une des revendications précédentes 19-34.

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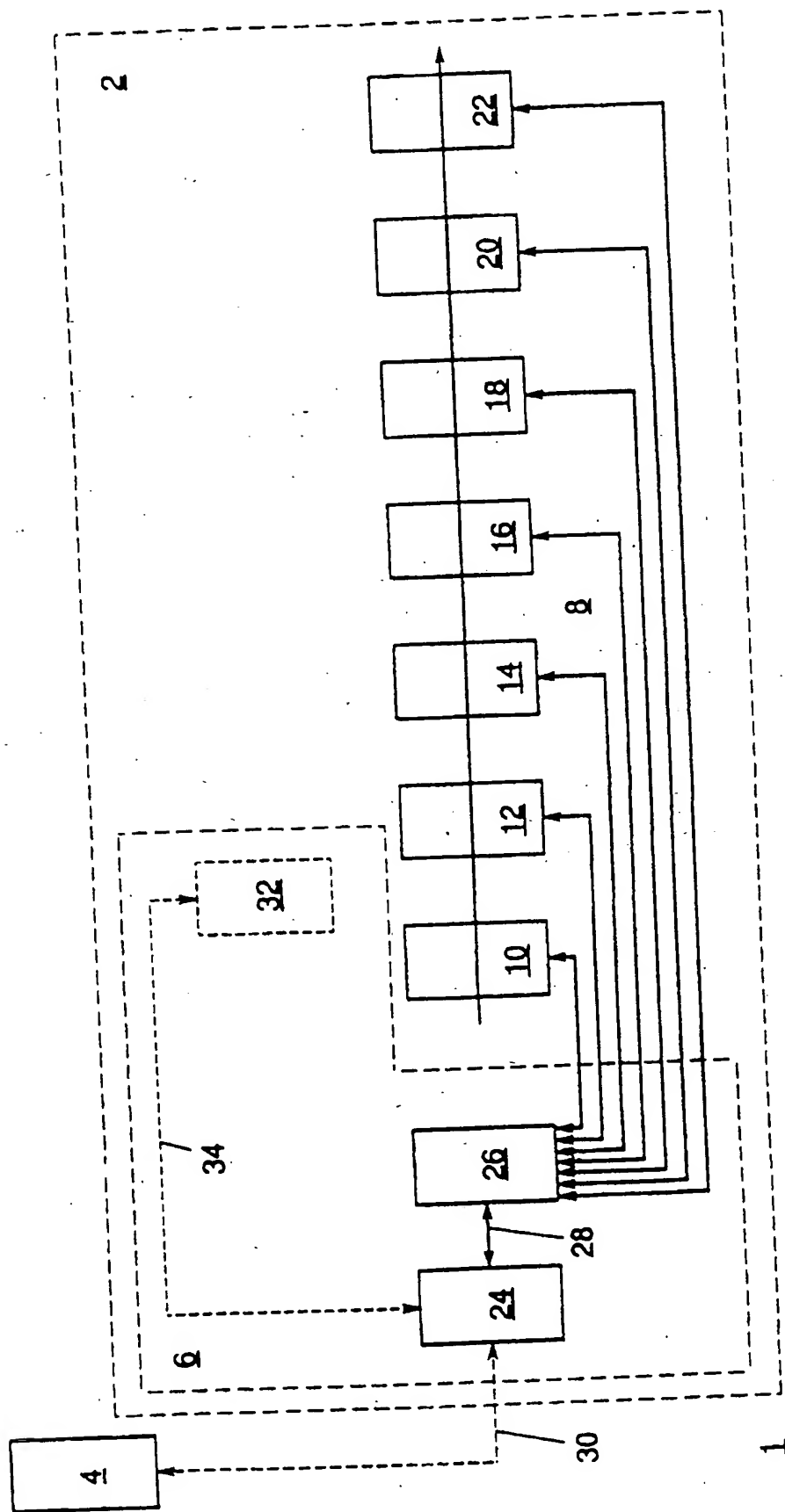


FIG. 1